# Data Fundamentals Lab 5: Calculating Averages and Percentages Changes

In this lab, you will download an Excel file from an open data portal, and then analyse its data. You will use formula in Excel to calculate averages and percentage changes to explore change over time. After completing this lab, you will be able to use Excel to:

- Filter and sort data
- Calculate numerical average or mean
- Calculate percentage change

#### Overview

In this lab, you will conduct a regional comparison to investigate trends in under-five mortality using World Bank data. You will first find and download the appropriate data to analyse, and then look for pattern on change in under-five mortality rate over time for Sub-Saharan Africa. You will also look at individual countries and find out by how much they have reduced this rate over the decade.

#### Hypothesis

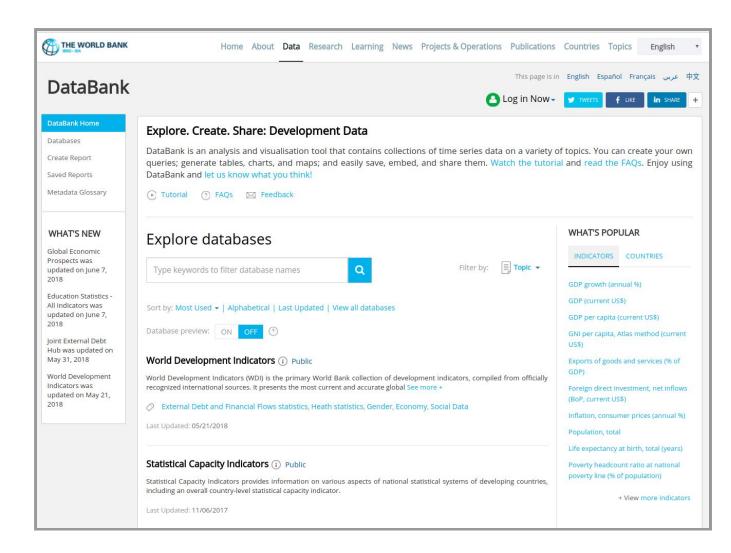
The region did not meet its goals to reduce child mortality.

#### Questions

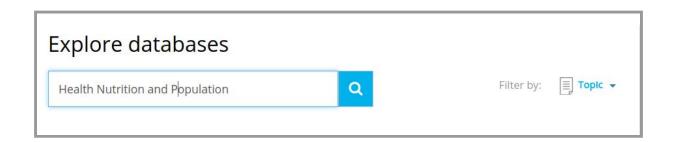
- 1. Which country had the highest 'Under five mortality rate' in 2015?
- 2. What was the regional average in 2015?
- 3. Which countries were above average and which were below?
- 4. How many were above and how many were below the MDG target?
- 5. Which country made the most progress over 15 years?
- 6. Which country made the least?

## Task 1: Getting Data

1. Open <a href="http://databank.worldbank.org/">http://databank.worldbank.org/</a> in your internet browser.

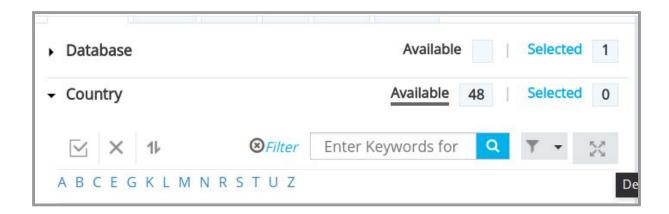


2. In search box under "Explore databases', type **Health, Nutrition and Population** and press Enter or select from the menu below.

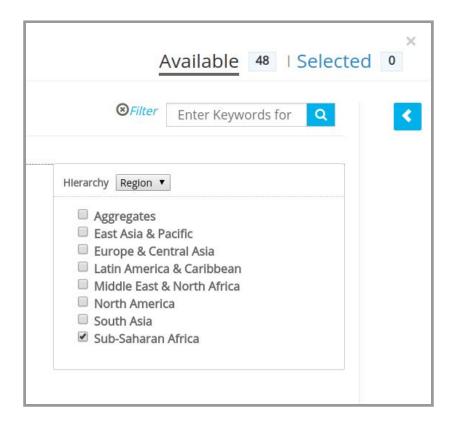


3. In the search results that appear, click **Health Nutrition and Population Statistics**.

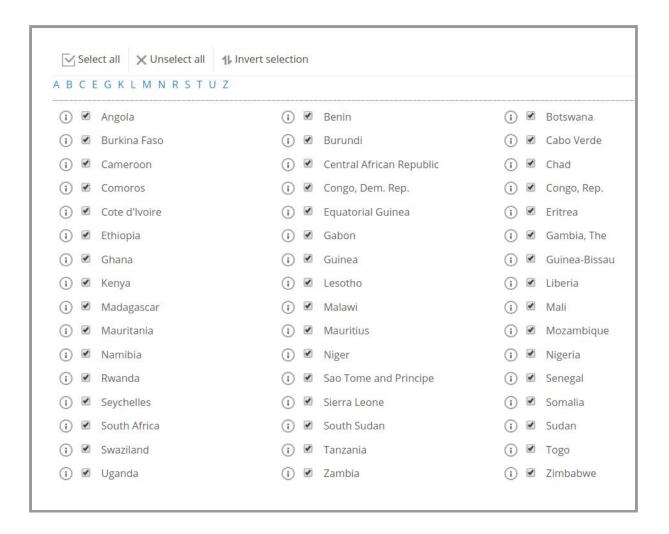
 In the screen that opens, click on the arrow by Country and click on the Detail view icon on the right.



5. This opens up a new window. From the Hierarchy drop-down list on the right, select **Region**. Check **Sub-Saharan African** from the list.



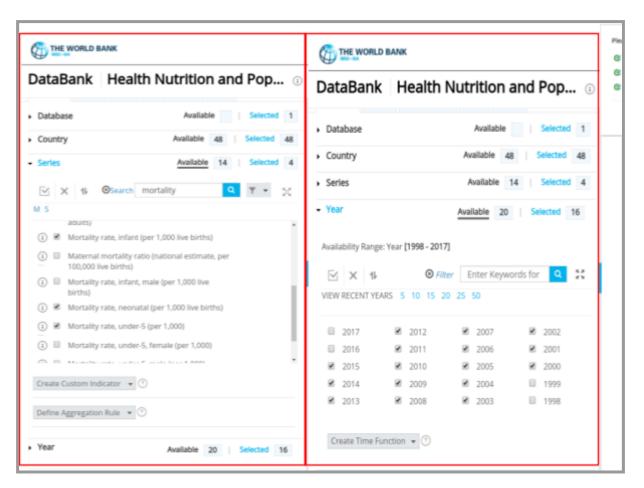
6. Click on **Select all** in the top right corner of the menu options to select all the countries under Sub-Saharan Africa..



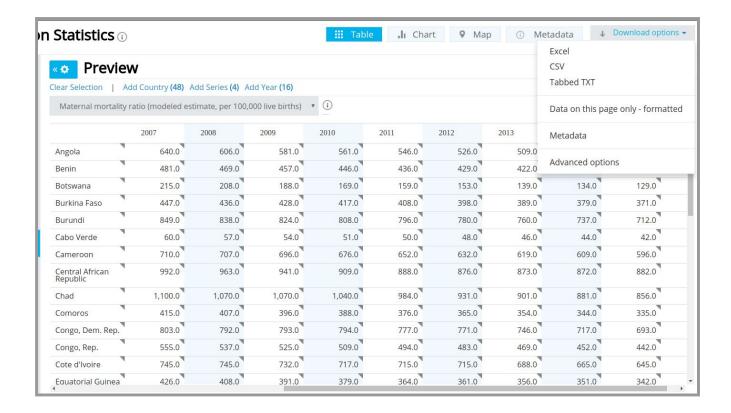
- 7. Click the **X** at the top-left corner of the window to return to the previous page. Now click **Series**.
- 8. Under Series, type mortality into the search bar, and press Enter
- 9. Now select the following indicators:
  - a. Maternal mortality ratio (modeled estimate, per 100,000 live births)
  - b. Mortality rate, infant (per 1,000 live births)
  - c. Mortality rate, neonatal (per 1,000 live births)
  - d. Mortality rate, under-5 (per 1,000)

#### 10. Click Year.

11. Under 'Year', select all years from 2000 to 2015. Then, click APPLY CHANGES. A table appears on the right:



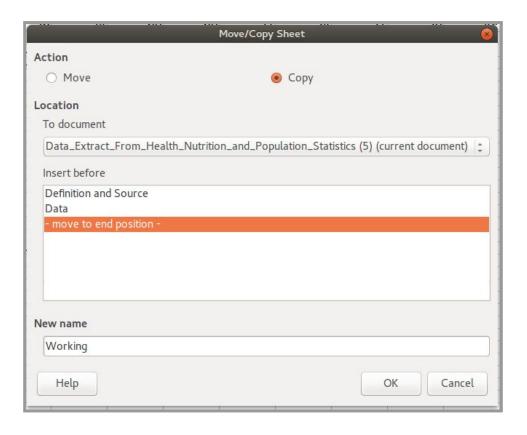
12. Click **Download Options**. Next, select **Excel**. An Excel file called **Data\_Extract\_From\_Health\_Nutrition\_and\_Population\_Statistics.xl sx** downloads to your computer.



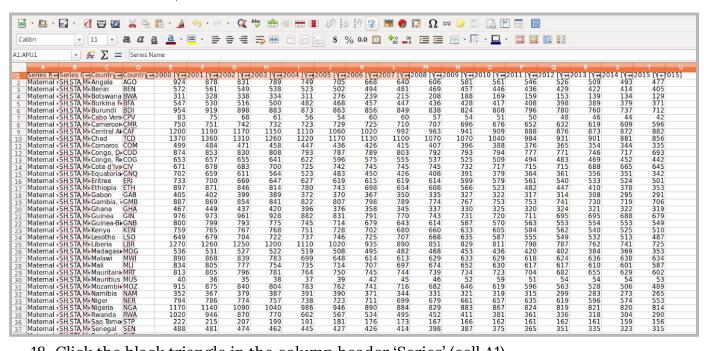
13. Open the downloaded Excel file. Read the definitions for the data in the **Definition and Source** tab.

### Task 2: Filtering Data

- 14. In the Excel file, open the **Data** tab.
- 15. Make a copy of the data in case you make a mistake. Right click on Data sheet - go to move or copy, in the window click on (move to end) and create a copy called **Working**. Click on OK.

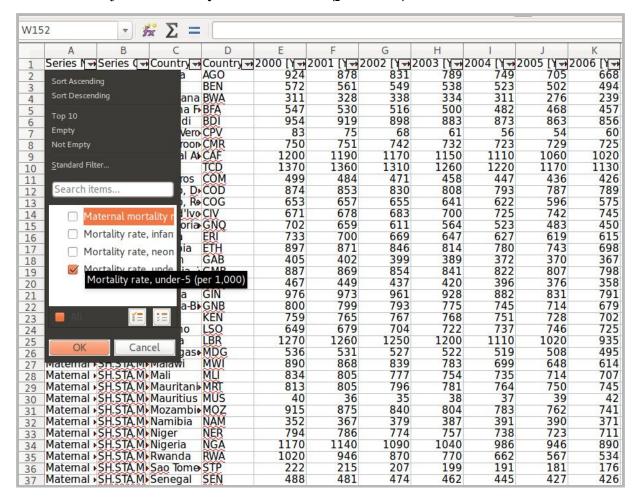


- 16. Click on row number 1 to highlight all of row 1.
- 17. In the Excel menu, click **Data** and then select **Filter** or **Autofilter** (in LibreOffice Calc).



- 18. Click the black triangle in the column header 'Series' (cell A1).
- 19. Unselect all values.





## Task 3: Sorting Data

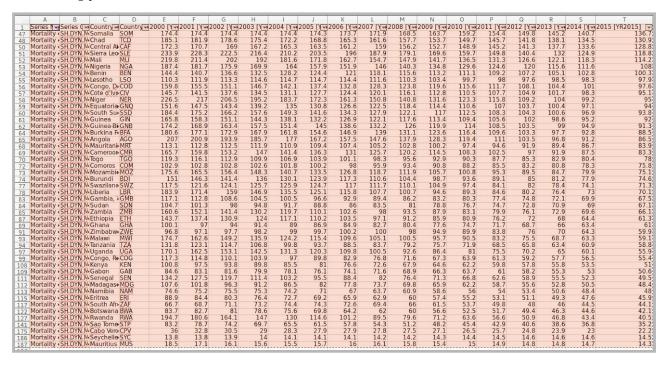
- 21. Click on the triangle next to 2015 [YR2015]. This is in cell T1
- 22. Select Sort Largest to Smallest or Sort Descending (in LibreOffice Calc).
- 23. Based on the sorted data, answer the following question:
  - a. Which country had the highest 'Under five mortality rate' in 2015?
- 24. Exercise 1: Sort the data further to answer these questions:
  - a. Which country had the highest rate of neonatal fatalities in 2003?
  - b. Which country had the lowest rate of infant deaths in 2012?

## Task 4: Calculating Averages

In this task, we will find the average (mean) rate of Under-five mortality for Sub-Saharan Africa for each year from 2000 - 2015. This will help us understand the trend in under-five mortalities for the entire region over these years.

Spreadsheets provide you a simple formula to calculate the numerical average or 'mean' =AVERAGE(First cell #: Last cell #)

25. In the last task, you filtered data for the Mortality rate, under-5 (per 1,000) indicator. Now select all the filtered data, right click and select Copy from the menu.



- 26. Add a new worksheet in the spreadsheet file.
- 27. In the new sheet, select the cell A1. Right click, and select **Paste Special** to past just the values.
- 28. Now, rename this new sheet to **Under 5**.

	Series Nan Series Coo Country N	Country	C 2000 [YP3 2	001 [VR3 2	מביב מאו כחת	003 LAB2 3	004 [YR2 2	005 [YR3 2	006 IVR2 20	007 [YR2 2	M NAR
		SOM	174.4	174.4	174.4	174.4	174.4	174.3	173.7	171.9	1
		TCD TCD	185.1	181.9	178.6	175.4	172.2	168.8	165.3	161.6	1
		~~~			169		165.3		161.2	159	
	Mortality SH.DYN.M. Central Af		172.3	170.7		167.2		163.5			1
	Mortality • SH.DYN.M• Sierra Leo•		233.9	228.3	222.5	216.4	210.2	203.5	196	187.9	1
		MLI	219.8	211.4	202	192	181.6	171.8	162.7	154.7	1
		NGA	187.4	181.7	175.9	169.9	164	157.9	151.9	146	1
		BEN	144.4	140.7	136.6	132.5	128.2	124.4	121	118.1	1
		LSO	110.3	111.9	113.3	114.6	114.7	114.7	114.4	111.6	1
	Mortality № SH.DYN.M Congo, De	COD	159.8	155.5	151.1	146.7	142.1	137.4	132.8	128.3	1
	Mortality № SH.DYN.M • Cote d'Ivo	CIV	145.7	141.5	137.6	134.5	131.1	127.7	124.4	120.1	1
	Mortality - SH.DYN.M Niger	NER	226.5	217	206.5	195.2	183.7	172.3	161.3	150.8	1
	Mortality PSH.DYN.M. Equatorial	GNO	151.6	147.5	143.4	139.2	135	130.8	126.6	122.5	1
	Mortality - SH.DYN.M. South Suo		184.4	175.2	166.2	157.6	149.3	141.6	134.3	127.9	1
		GIN	165.8	158.3	151.1	144.3	138.1	132.2	126.9	122.1	1
	Mortality - SH.DYN.M. Guinea-Bis		174.2	168.9	163.4	157.5	151.4	145	138.6	132.2	
	Mortality PSH.DYN.M Burkina Fa		180.6	177.1	172.9	167.9	161.8	154.6	146.9	139	1
		AGO	207	200.9	193.9	185.7	177	167.2	157.5	147.6	1
	Mortality • SH.DYN.M• Mauritania		113.1	112.8	112.5	111.9	110.9	107.2	107.4	105.2	1
	Mortality SH.DYN.M. Cameroon		165.7	159.8	153.2	147	141.4	136.3	131	125.7	1
			119.3	116.1	112.9	109.9	106.9	103.9	101.1	98.3	
		TGO									
		COM	102.9	102.8	102.8	102.6	101.8	100.2	98	95.9	
	Mortality n SH.DYN.M. Mozambio		175.6	165.5	156.4	148.3	140.7	133.5	126.8	118.7	1
		BDI	151	146.3	141.4	136	130.1	123.9	117.3	110.6	1
	Mortality • SH.DYN.M• Swaziland		117.5	121.6	124.1	125.7	125.9	124.7	117	111.7	1
		LBR	183.9	171.4	159	146.9	135.5	125.1	115.8	107.7	1
	Mortality - SH.DYN.M Gambia, T		117.1	112.8	108.6	104.5	100.5	96.6	92.9	89.4	
		SDN	104.7	101.3	98	94.8	91.7	88.8	86	83.5	
	Mortality - SH.DYN.M. Zambia	ZMB	160.6	152.1	141.4	130.2	119.7	110.1	102.6	98	
		ĒŤĤ	143.7	137.4	130.9	124	117.1	110.2	103.5	97.1	
		GHA	100.1	97	94	91.4	89	86.9	84.9	82.7	
	Mortality - SH.DYN.M. Zimbabwe		96.8	97.1	97.7	98.2	99	99.7	100.2	100	
		MWI	174.7	162.6	149.2	135.9	124.2	115.4	109.6	105.1	1
		TZA	131.8	123.1	114.7	106.8	99.8	93.7	88.5	83.7	-
		UGA	170.1	162.5	153.1	142.5	131.3	120.3	109.8	100.5	
	Mortality SH.DYN.M. Congo. Re-		117.3	114.8	110.1	103.9	97	89.8	82.9	76.8	
			100.8	97.5	93.8	89.8	85.5	81	76.6	72.6	
		KEN GAB									
			84.6	83.1	81.6	79.9	78.1	76.1	74.1	71.6	
		SEN	134.2	127.5	119.7	111.4	103.2	95.5	88.4	82	
	Mortality - SH.DYN.M - Madagaso		107.6	101.8	96.3	91.2	86.5	82	77.8	73.7	
		NAM	74.6	75.2	75.5	75.3	74.2	71	67	63.7	
		ERI	88.9	84.4	80.3	76.4	72.7	69.2	65.9	62.9	
	Mortality - SH.DYN.M South Afri		66.7	68.7	71.1	73.2	74.4	74.3	72.6	69.4	
	Mortality - SH.DYN.M Botswana	BWA	83.7	82.7	81	78.6	75.6	69.8	64.2	62	
	Mortality - SH.DYN.M Rwanda	RWA	194.7	180.6	164.1	147	130	114.6	101.2	89.5	
	Mortality - SH.DYN.M. Sao Tome -	STP	83.2	78.7	74.2	69.7	65.5	61.5	57.8	54.3	
	Mortality - SH.DYN.M. Cabo Verd.		36	32.8	30.5	29	28.3	27.9	27.9	27.8	
	Mortality NSH.DYN.M. Seychelles		13.8	13.8	13.9	14	14.1	14.1	14.1	14.2	
	Mortality PSH.DYN.M Mauritius		18.5	17.1	16.1	15.6	15.5	15.7	16	16.1	
-	i ioi conte i poi no i i in i i i i i i i i i i i i i i		10.5	.00	10.1	15.5	10.5	10.7	10	10.1	

- 29. Next, in cell A50, type **Mean**.
- 30. In cell E50, enter the formula **=AVERAGE(E2:E49)**, and press **Enter.** Now you have the average under-five mortality rate for Sub-Saharan Africa in 2000.

	A	В	С	D	E	F	G	Н	1	J	K
13	Mortality	<b>⊳</b> SH.DYN	M Equatorial	GNQ	151.6	147.5	143.4	139.2	135	130.8	126.6
14	Mortality	N SH.DYN	M South Suo	SSD	184.4	175.2	166.2	157.6	149.3	141.6	134.3
15	Mortality	→ SH.DYN	.M Guinea	GIN	165.8	158.3	151.1	144.3	138.1	132.2	126.9
16	Mortality	<b>№ SH.DYN</b>	.M. Guinea-Bis	GNB	174.2	168.9	163.4	157.5	151.4	145	138.6
17	Mortality	→ SH.DYN	.M. Burkina Fa	BFA	180.6	177.1	172.9	167.9	161.8	154.6	146.9
18			.M. Angola	AGO	207	200.9	193.9	185.7	177	167.2	157.5
19	Mortality	» SH.DYN	.M. Mauritania	MRT	113.1	112.8	112.5	111.9	110.9	109.4	107.4
20	Mortality	<b>№ SH.DYN</b>	.M. Cameroon	CMR	165.7	159.8	153.2	147	141.4	136.3	133
21	Mortality			TGO	119.3	116.1	112.9	109.9	106.9	103.9	101.1
22	Mortality	<b>№ SH.DYN</b>	.M. Comoros	COM	102.9	102.8	102.8	102.6	101.8	100.2	98
23	Mortality	<b>№ SH.DYN</b>	.M. Mozambio	MOZ	175.6	165.5	156.4	148.3	140.7	133.5	126.8
24	Mortality	<b>№ SH.DYN</b>	.M. Burundi	BDI	151	146.3	141.4	136	130.1	123.9	117.3
25			.M. Swaziland		117.5	121.6	124.1	125.7	125.9	124.7	117
26			.M. Liberia	LBR	183.9	171.4	159	146.9	135.5	125.1	115.8
27			.M. Gambia, T.		117.1	112.8	108.6	104.5	100.5	96.6	92.9
28			.M Sudan	SDN	104.7	101.3	98	94.8	91.7	88.8	86
29		~~~~	.M. Zambia	ZMB	160.6	152.1	141.4	130.2	119.7	110.1	102.6
30			.M. Ethiopia	ĒŤĤ	143.7	137.4	130.9	124	117.1	110.2	103.5
31			.M. Ghana	GHA	100.1	97	94	91.4	89	86.9	84.9
32	Mortality	D SH.DYN	.M. Zimbabwe		96.8	97.1	97.7	98.2	99	99.7	100.2
33			.M Malawi	MWI	174.7	162.6	149.2	135.9	124.2	115.4	109.6
34			.M. Tanzania	TZA	131.8	123.1	114.7	106.8	99.8	93.7	88.5
35			.M. Uganda	ÜĞA	170.1	162.5	153.1	142.5	131.3	120.3	109.8
36			.M. Congo, Re		117.3	114.8	110.1	103.9	97	89.8	82.9
37			.M. Kenya	KEN	100.8	97.5	93.8	89.8	85.5	81	76.6
38			.M. Gabon	GAB	84.6	83.1	81.6	79.9	78.1	76.1	74.
39			.M. Senegal	SEN	134.2	127.5	119.7	111.4	103.2	95.5	88.4
40			.M. Madagaso		107.6	101.8	96.3	91.2	86.5	82	77.8
41			.M. Namibia	NAM	74.6	75.2	75.5	75.3	74.2	71	67
42			.M. Eritrea	ERI	88.9	84.4	80.3	76.4	72.7	69.2	65.9
43			.M. South Afri		66.7	68.7	71.1	73.2	74.4	74.3	72.0
44			.M. Botswana		83.7	82.7	81	78.6	75.6	69.8	64.
45			.M. Rwanda	RWA	194.7	180.6	164.1	147	130	114.6	101.2
46			.M. Sao Tome		83.2	78.7	74.2	69.7	65.5	61.5	57.8
47			.M. Cabo Verd		36	32.8	30.5	29	28.3	27.9	27.9
48			.M. Seychelles		13.8	13.8	13.9	14	14.1	14.1	14.
49			.M. Mauritius		18.5	17.1	16.1	15.6	15.5	15.7	16
50	Mean	" Street	na Piddindus		=AVERAGE(E		10.1	15.0	13.3	13.7	10

31. Copy the equation to the other columns on the right to see the average for each year. To do this, hover over the bottom right corner of cell E50 until a black or white plus appears. Click and hold, dragging across the columns in row 50.

159.8		G	- 1			K		M	N	0	-	Q	R	S	
139.8	155.5	151.1	146.7	142.1	137.4	132.8	128.3	123.8	119.6	115.6	111.7	108.1	104.4	101	97.6
145.7	141.5	137.6	134.5	131.1	127.7	124.4	120.1	116.1	112.8	110.5	107.7	104.9	101.7	98.3	95.1
226.5	217	206.5	195.2	183.7	172.3	161.3	150.8	140.8	131.6	123.3	115.8	109.2	104	99.2	95
151.6	147.5	143.4	139.2	135	130.8	126.6	122.5	118.4	114.4	110.6	107	103.7	100.4	97.1	94
184.4	175.2	166.2	157.6	149.3	141.6	134.3	127.9	122.1	117	112.5	108.3	104.3	100.6	96.9	93.8
165.8	158.3	151.1	144.3	138.1	132.2	126.9	122.1	117.6	113.4	109.4	105.6	102	98.6	95.2	92
174.2	168.9	163.4	157.5	151.4	145	138.6	132.2	126	119.9	114	108.5	103.5	99	94.9	91.3
180.6	177.1	172.9	167.9	161.8	154.6	146.9	139	131.1	123.6	116.4	109.6	103.3	97.7	92.8	88.5
207	200.9	193.9	185.7	177	167.2	157.5	147.6	137.9	128.3	119.4	111	103.5	96.8	91.2	86.5
113.1	112.8	112.5	111.9	110.9	109.4	107.4	105.2	102.8	100.2	97.4	94.6	91.9	89.4	86.7	83.9
165.7	159.8	153.2	147	141.4	136.3	131	125.7	120.2	114.5	108.3	102.5	97	91.9	87.5	83.3
119.3	116.1	112.9	109.9	106.9	103.9	101.1	98.3	95.6	92.9	90.3	87.7	85.3	82.9	80.4	78
102.9	102.8	102.8	102.6	101.8	100.2	98	95.9	93.4	90.8	88.2	85.5	83.2	80.8	78.3	75.8
175.6	165.5	156.4	148.3	140.7	133.5	126.8	118.7	111.9	105.7	100.8	95.3	89.5	84.7	79.9	75.1
151	146.3	141.4	136	130.1	123.9	117.3	110.6	104.4	98.7	93.6	89.1	85	81.2	77.9	74.6
117.5	121.6	124.1	125.7	125.9	124.7	117	111.7	110.1	104.9	97.4	84.1	82	78.4	74.1	71.3
183.9	171.4	159	146.9	135.5	125.1	115.8	107.7	100.7	94.6	89.3	84.6	80.2	76.4	73	70.1
117.1	112.8	108.6	104.5	100.5	96.6	92.9	89.4	86.2	83.2	80.3	77.4	74.8	72.1	69.9	67.5
104.7	101.3	98	94.8	91.7	88.8	86	83.5	81	78.8	76.7	74.7	72.8	70.9	69	67.1
160.6	152.1	141.4	130.2	119.7	110.1	102.6	98	93.5	87.9	83.1	79.9	76.1	72.9	69.6	66.1
143.7	137.4	130.9	124	117.1	110.2	103.5	97.1	91.2	85.9	80.9	76.2	72	68	64.4	61.3
100.1	97	94	91.4	89	86.9	84.9	82.7	80.4	77.6	74.7	71.7	68.7	66	63.4	61
96.8	97.1	97.7	98.2	99	99.7	100.2	100	98	94.9	89.9	83.8	76	70	64.3	59.9
174.7	162.6	149.2	135.9	124.2	115.4	109.6	105.1	100.5	95.7	90.5	83.2	75.5	68.7	63.3	59.1
131.8	123.1	114.7	106.8	99.8	93.7	88.5	83.7	79.2	75.7	71.9	68.5	65.8	63.4	60.9	58.8
170.1	162.5	153.1	142.5	131.3	120.3	109.8	100.5	92.6	86.4	81	75.5	70.2	65	60.1	55.9
117.3	114.8	110.1	103.9	97	89.8	82.9	76.8	71.6	67.3	63.9	61.3	59.2	57.7	56.5	55.4
100.8	97.5	93.8	89.8	85.5	81	76.6	72.6	67.9	64.6	62.2	59.8	57.8	55.8	53.5	51
84.6	83.1	81.6	79.9	78.1	76.1	74.1	71.6	68.9	66.3	63.7	61	58.2	55.3	53	50.6
134.2	127.5	119.7	111.4	103.2	95.5	88.4	82	76.4	71.3	66.8	62.6	58.9	55.5	52.3	49.5
107.6	101.8	96.3	91.2	86.5	82	77.8	73.7	69.8	65.9	62.2	58.7	55.6	52.8	50.5	48.4
74.6	75.2	75.5	75.3	74.2	71	67	63.7	60.9	58.6	56	54	53.4	50.6	48.4	48
88.9	84.4	80.3	76.4	72.7	69.2	65.9	62.9	60	57.4	55.2	53.1	51.1	49.3	47.6	45.9
66.7	68.7	71.1	73.2	74.4	74.3	72.6	69.4	66	61.5	53.7	49.8	48	46	44.5	44.1
83.7	82.7	81	78.6	75.6	69.8	64.2	62	60	56.6	52.5	51.7	49.4	46.3	44.6	42.1
194.7	180.6	164.1	147	130	114.6	101.2	89.5	79.6	71.2	63.6	56.6	50.9	46.8	43.4	40.5
83.2	78.7	74.2	69.7	65.5	61.5	57.8	54.3	51.2	48.2	45.4	42.9	40.6	38.6	36.8	35.2
36	32.8	30.5	29	28.3	27.9	27.9	27.8	27.5	27.1	26.5	25.7	24.8	23.9	23	22.2
13.8	13.8	13.9	14	14.1	14.1	14.1	14.2	14.2	14.3	14.4	14.5	14.6	14.6	14.6	14.5
18.5	17.1	16.1	15.6	15.5	15.7	16	16.1	15.8	15.4	15	14.9	14.8	14.8	14.7	14.3
136.59167	132.1625 1:	27.42708 12	22.55417 13				03.16042			90.03125		82.302083	78.920833 7	5.779167 7	

**32. Exercise 2:** Based on what you have learned, calculate the **mean infant mortality rate** for all countries over the years.

# Task 5: Calculating Percentage Change

After calculating the average rate per year across the region - you want to focus on figuring out how each country has improved on reducing under-five mortality between 2000 and 2015. In this case, you will look at the percentage change in the under-five mortality between these two years.

In general, to calculate the percentage change between two numbers – you need to first work out the change between the two numbers you are comparing. Then, divide the changed amount by the original number and right click, format cells and select percentage to change from a decimal to percentage. If your answer is a negative number, then this is a percentage decrease. In our scenario, a negative % change would indicate that the under-five mortality rate has decreased over the decade.

- 33. In cell U1 of the "Under 5" sheet that you created, type **Percentage**Change 2000 to 2015.
- 34. In cell U2 enter =(T2-E2) and then press Enter.

	G	Н	- 1	J	K	L	М	N	0	P	Q	R	S	Т	U
1	2002 [YR2	2003 [YR2	2004 [YR2	2005 [YR2	2006 [YR2	2007 [YR2)	2008 [YR2	2009 [YR2	2010 [YR2	2011 [YR2	2012 [YR2	2013 [YR2	2014 [YR2	2015 [YR2015]	Percentage Change 2000 to 2015
2	174.4	174.4	174.4	174.3	173.7	171.9	168.5	163.7	159.2	154.4	149.8	145.2	140.7	136.7	' =(T2-E2)/E2
3	178.6	175.4	172.2	168.8	165.3	161.6	157.7	153.7	149.7	145.7	141.8	138.1	134.5	130.9	
4	169	167.2	165.3	163.5	161.2	159	156.2	152.7	148.9	145.2	141.3	137.7	133.6	128.8	3
5	222.5	216.4	210.2	203.5	196	187.9	179.1	169.6	159.7	149.8	140.4	132	124.9	118.8	3
6	202	192	181.6	171.8	162.7	154.7	147.9	141.7	136.5	131.3	126.6	122.1	118.3	114.2	2
7	175.9	169.9	164	157.9	151.9	146	140.3	134.8	129.6	124.6	120	115.6	111.6	108	3

- 35. Hover over the bottom right corner of the cell U2 until a black or white plus appears. Click and hold, dragging across the rows in column T.
- 36. Now select the values in column U, and right click. Select Format Cell.

  Next select Percentage or Percent (LibreOffice Calc), and then click OK.

#### These are our results.

Q	R	S	Т	U
2012 [YR2) 2	013 [YR2) 2	2014 [YR2	2015 [YR2015]	Percentage Change 2000 to 2015
149.8	145.2	140.7	136.7	-21.62%
141.8	138.1	134.5	130.9	-29.28%
141.3	137.7	133.6	128.8	-25.25%
140.4	132	124.9	118.8	-49.21%
126.6	122.1	118.3	114.2	-48.04%
120	115.6	111.6		-42.37%
107.2	105.1	102.8	100.3	-30.54%
97.6	98.5	98.3	97.9	-11.24%
108.1	104.4	101	97.6	-38.92%
104.9	101.7	98.3	95.1	-34.73%
109.2	104	99.2	95	-58.06%
103.7	100.4	97.1	94	-37.99%
104.3	100.6	96.9	93.8	-49.13%
102	98.6	95.2	92	-44.51%
103.5	99	94.9	91.3	-47.59%
103.3	97.7	92.8	88.5	-51.00%
103.5	96.8	91.2	86.5	-58.21%
91.9	89.4	86.7	83.9	-25.82%
97	91.9	87.5	83.3	-49.73%
85.3	82.9	80.4	78	-34.62%
83.2	80.8	78.3	75.8	-26.34%
89.5	84.7	79.9		-57.23%
85	81.2	77.9		-50.60%
82	78.4	74.1	71.3	-39.32%
80.2	76.4	73		-61.88%
74.8	72.1	69.9	67.5	-42.36%
72.8	70.9	69		-35.91%
76.1	72.9	69.6	66.1	-58.84%
72	68	64.4	61.3	-57.34%
68.7	66	63.4	61	-39.06%
76	70	64.3	59.9	-38.12%
75.5	68.7	63.3		-66.17%
65.8	63.4	60.9	58.8	-55.39%
70.2	65	60.1	55.9	-67.14%
59.2	57.7	56.5	55.4	-52.77%
57.8	55.8	53.5	51	-49.40%
58.2	55.3	53	50.6	-40.19%
58.9	55.5	52.3	49.5	-63.11%
55.6	52.8	50.5	48.4	-55.02%
53.4	50.6	48.4		-35.66%
51.1	49.3	47.6	45.9	-48.37%
48	46	44.5	44.1	-33.88%
49.4	46.3	44.6	42.1	-49.70%

**Exercise 3:** Calculate the **percentage change for maternal mortality** between 2000 and 2015 for each country in the region.